

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/011657

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> H01L21/3065

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H01L21/3065, H01L21/205, H05H1/46

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004  
Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2002-075961 A (Toshiba Corp.), 15 March, 2002 (15.03.02), Par. Nos. [0022] to [0029]; Fig. 2 (Family: none)	1 4, 8-10
X Y	JP 09-045495 A (ULVAC Japan Ltd.), 14 February, 1997 (14.02.97), Par. Nos. [0012] to [0027]; Fig. 1 (Family: none)	1, 6 4, 8-10
X Y	JP 10-298787 A (Shibaura Engineering Works Co., Ltd.), 10 November, 1998 (10.11.98), Par. Nos. [0022] to [0047]; Fig. 1 (Family: none)	3, 7 4, 8-10

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family

Date of the actual completion of the international search  
29 October, 2004 (29.10.04)Date of mailing of the international search report  
16 November, 2004 (16.11.04)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

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Telephone No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2001-115267 A (Canon Inc.), 24 April, 2001 (24.04.01), Par. Nos. [0029] to [0089]; Fig. 1 (Family: none)	5 4,8-10
Y	JP 2000-183040 A (Canon Inc.), 30 June, 2000 (30.06.00), Par. Nos. [0038] to [0055] (Family: none)	8-10
A	JP 11-045873 A (ULVAC Japan Ltd.), 16 February, 1999 (16.02.99), Full text (Family: none)	1-10
A	JP 2001-110775 A (Akuserisu Technologies Inc.), 20 April, 2001 (20.04.01), Full text & US 2001/0027016 A1	1-10

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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

The inventions in Claims 1, 2, 4, 6, and 7 relate to a plasma processing device in which an opening is made in the inner wall of a chamber positioned generally vertical to the principal plane of a body to be processed and the body to be processed is not installed on the line of direct sight from plasma.

The invention in Claim 3 relates to a plasma processing device in which a connection tube is openably connected to the inner wall of the chamber positioned generally opposite to the principal plane of the body to be processed and the inner wall of the connection tube is formed of a fluorine-containing (continued to extra sheet)

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

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Continuation of Box No. III of continuation of first sheet(2)

resin.

The invention in Claim 5 relates to a plasma processing device in which a light shielding body which shields light released from the plasma and allows active species released from the plasma to pass therethrough is installed between the plasma and the body to be processed.

The inventions in Claims 8-10 relate to an ashing for removing resists in the state of light not substantially radiated to the body to be processed.

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